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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,669	08/07/2003	Lewis K. Cime	P1954C-944	8894
21839 7590 02/12/2008 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER LIN, WEN TAI	
			ART UNIT 2154	PAPER NUMBER
			NOTIFICATION DATE 02/12/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/635,669

Applicant(s)

CIRNE ET AL.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-66 are presented for examination. Claims 60-66 are newly added.
2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.
3. Acknowledgement is made of the receipt of a terminal disclaimer filed 11/21/2007. Accordingly, the previous double patenting rejection is withdrawn.

Claim Rejections - 35 USC § 102

4. Claims 1, 6-8, 12-13, 18-20, 24-25, 28-29, 32, 36, 39, 41-45, 49-50 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Carney et al.[U.S. Pat. No. 5774729].
5. Carney was cited in the previous office action.
6. As to claims 1 and 12, Carney teaches the invention as claimed including: a method for routing an event to a human interface object [e.g., an interactive debugger, a

mouse/keyboard event handler] in a computer system [Tables 1-2], said method comprising:

assigning a routing type to an event [e.g., Abstract; i.e., broadcast or targeted routing types];

receiving an event [e.g., 33, Fig.3];

determining the routing type of the received event [e.g., 34-35, Fig.3] and;

routing the event to a human interface object based on the determined routing type for the event [e.g., col.5 lines 54-63; col.1, line 59 – col.2 line 15; note that an interactive debugger is a human interface object. Furthermore, each human interface object in a computer system (such as a displayed keyboard, physical keyboard and mouse each has a related input/output routine) must be associated with at least a programming language and therefore is an inherent member of one of the event handler (col.1, lines 38-49)].

7. As to claim 6, Carney further teaches that one or more clients can register interest in an event such that when the event is received, the event is sent to each client which registered interest [e.g., col.1 lines 38-54; col. 10, lines 1-4].

8. As to claim 7, Carney further teaches that a client can unregister interest in an event [e.g., 12, Fig.1; col.4, lines 1-19; i.e., when a routine is removed from its PPA it is unregistered from its associated event].

9. As to claim 8, Carney further teaches that an indication as to interest is maintained for each event and is updated when a client registers and unregisters interest in the event [col.4, lines 1-19; col.4, lines 41-60; col.6, lines 1-20; i.e., each member is assigned a member number or code as an indication of interest in the event and such membership is inherently updated through PPA after compilation].

10. As to claims 13, 18-20, 24-25, 28-29, 32, 36, 39, 41-45, 49-50 and 54, since the features of these claims can also be found in claims 1, 6-8 and 12, they are rejected for the same reasons set forth in the rejection of claims 1, 6-8 and 12 above.

Claim Rejections - 35 USC § 103

11. Claims 2-5, 9-11, 14-17, 21-23, 26-27, 30-31, 33-35, 37-38, 40, 46-48, 51-53 and 55-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carney et al.(hereafter "Carney")[U.S. Pat. No. 5774729], as applied to claims 1, 6-8, 12-13, 18-20, 24-25, 28-29, 32, 36, 39, 41-45, 49-50 and 54 above.

12. As to claim 2, Carney teaches that said routing type is a member of a set including a first routing type that is routed via broadcast mode and a second routing type that is routed based on a targeted mode [Abstract; col.4 lines 41-60].

Carney does not specifically teach that the target routing type is further divided into geometric and focus types.

However, events based on geometric coordinates (such as a mouse event) and focus type (such as a keyboard event) are well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Carney's system must have dealt with the mouse event and keyboard event differently because these two types of event are associated with different event code and parameters, with which Carney's event handling unit [e.g., 11, Fig.1] can obviously distinguish the differences (based on the associated event code and parameters) between the these events and route them to different event handlers. In other words, it is obvious that an ordinary artisan may further categorize events that fall into Carney's targeted mode, such as keyboard and mouse events, into different sub-categories depending on their event codes and associated parameters because this is a programmer's design choice.

13. As to claim 3, Carney further teaches that the set further includes another routing type that is broadcast to a plurality of interface objects [e.g., Abstract; col.4 lines 41-60].

14. As to claims 4-5, Carney does not specifically teach that the routing type is one of an extensible plurality of routing types, wherein routing types can be added or deleted to said plurality.

However, for the same reasons stated in the rejection of claim 2 above, it is obvious to further subdivide Carney's targeted events into various sub-categories and

make it extensible because of the complexity in various execution environments [e.g., col. 1, lines 27-36].

15. As to claims 9-11, Carney does not specifically teach that the indication is a count which is incremented when a client registers interest in the event and is decremented when a client un-registers interest in the event, wherein said indication as to interest is maintained by adding an event to a handler table, and wherein when the indication no longer indicates interest in an event, the event is removed from said handler table.

However, since Carney's system maintains a list of members associated with each event, it would be obvious to add a parameter to count the number of members as an indication of interest in the respective event because it saves additional effort from counting the members in each list [e.g., col.6, lines 1-41; Table 1].

16. As to claims 14-17, 21-23, 26-27, 30-31, 33-35, 37-38, 40, 46-48, 51-53 and 55-59-66, since the features of these claims can also be found in claims 1-6, 8-11, 13, 18, 20, 25, 29, 36, 45, 50 and 54, they are rejected for the same reasons set forth in the rejection of claims 1-6, 8-11, 13, 18, 20, 25, 29, 36, 45, 50 and 54 above.

As to the additional limitations requiring the human interface object to comprise a displayed GUI or one of a window, panel, editable text, push button, list box and radio button in claims 60-66: it is obvious that Carney's method is applicable to the events associated with these types of objects, because these objects are popular in a computer

environment (e.g., a browser) and their respective event handlers may be developed in certain programming languages such that a routing attribute can be associated with each of the event in accordance with Carney's teachings.

17. Applicant's arguments filed 11/21/07 for claim 1 have considered, but they are not deemed to be persuasive (note that arguments related to claims 2 and 4-5 are moot because of the new reasoning used in the rejection).

In the remarks Applicant argues that Carney's event handlers are not human interface objects because they are objects that appear on the display of a computer system, with which the human user interacts, hence Carney does not teach that the events are routed to their respective human interface object based on the designated routing type.

18. The examiner respectfully disagrees. There is no exclusive definition, in the specification or in the claim language, for the term "human interface object". Thus the term has been broadly interpreted as a piece of program code (i.e., an object) for handling events relating to human interface. For this reason, a keyboard or mouse event handler is considered as a human interface object; a debug handler is also viewed as a human interface object. As a matter of fact, even if one restrict the "human interface object" to specific objects such as a window, panel, editable text, push button, list box or radio button, the various programs handling each of these objects could still

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be called event handlers. For this reason, it is submitted that Carney is prior art to the claims.

19. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquiries draft communication.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

February 6, 2008

Wen-Tai Lin
2/6/08